

AMENDMENTS TO THE SPECIFICATION

Please amend page 24, line 13 through page 25, line 28, as follows:

-- Figures 13-16 illustrates head 1314-1614 of a manual toothbrush 1310 in accordance with one embodiment of this invention. Head 1314 is attached to handle 1312 (partially shown in Fig. 13). In one embodiment, two groups of cleaning/treating elements or bristles are arranged on head 1314-1614. The first group as illustrated in Fig. 13 is located in the central region of the head 1314 and comprises cleaning/treating elements 1318 in the form of strands or bristles.

The first group of cleaning elements 1318, 1418, 1518 is preferably mounted in a central movable portion 1417, 1517 of head 1314, 1414, 1514 that may be deflected downward in the direction of the arrow shown in Fig. 15 when a certain force is applied to the toothbrush handle. This movement of the central portion 1417, 1517 of head 1514 is facilitated by the flexible attachment of central portion 1417, 1517 to the balance of the head by elastomeric or other flexible material 1320, 1420, 1520. The elastomeric material 1320, 1420, 1520 bridges the gap between the central movable portion 1417, 1517 of head 1314, 1414, 1514 and the rigid portion 1415, 1515 of the head as illustrated in Figs. 14 and 15.

Elastomeric material 1320, 1420, 1520 is preferably of a material or combinations of material that can flex to become altered from its original shape and recover to its original shape randomly during brushing.

The first group of cleaning/treating elements 1318, 1418, 1518 flexibly mounted in head 1314-1614 and ~~1614~~ (Figure ~~16~~) are complemented by a second group of fixed cleaning/treating elements 1322, 1422, 1522 generally arrayed in a surrounding relationship with the first group 1318, 1418, 1518.

The first and second group of cleaning/treating elements work together to provide improved cleansing of teeth. As illustrated in Figs 14 and 15 when minimal force is applied to toothbrush 1310 the end of the central group of cleaning elements 1418, 1518 facing the toothbrush user extend approximately the same distance from head 1414, 1514 as the outer or fixed group of cleansing elements 1422, 1522. When additional force is applied to the toothbrush, the center moveable portion 1517 of head 1514 slightly displaces downward (see Fig 15). This facilitates deeper penetration of the second group of cleaning elements 1422, 1522 into the interproximal areas between teeth where plaque and food deposits can cause decay.

To further promote teeth cleaning, the toothbrush 1310 of this invention may include, for example, wipers 1324 positioned between the two groups of cleaning/treating elements as best illustrated in Figure 13. These wipers are preferably made of rubber or like material with a typical cross-section as illustrated in Figs. 14 and 15. These wipers 1324, 1424, 1524 extend radially from head 1314, 1414, 1514 and are preferably mounted on the flexible elastomeric material 1320, 1420, 1520 that bridges the gap between the first 1318, 1418, 1518 and second 1322, 1422, 1522 groups of cleaning elements. The outer ends 1325, 1425, 1525 of wiper 1324, 1424, 1524 will move inward toward each other upon application of force to the toothbrush due to the downward displacement of the movable portion 1417, 1517 of head 1314, 1414, 1514. As illustrated in Fig. 15 this downward displacement of movable portion 1517 of head 1514 causes the outer ends 1525 of wipers 1524 to sweep across the teeth thereby further enhancing the cleansing action of toothbrush 1310. Upon reduction of force on the toothbrush the movable portion 1517 of head 1514 moves back to its normal position, causing the ends 1525 of wipers 1524 to rotate back across the teeth. The extent of the sweeping motion of ends 1525 of wipers 1524 can be controlled by the location of the wipers relative to the placement of the elastomeric

material 1520 between the two groups of cleaning elements. Further, any suitable form of cleaning/treating elements may be used as the cleaning/treating elements 1318 and 1322 in the broad practice of this invention.

It is to be understood that the specific illustration of the cleaning/treating elements is merely for exemplary purposes. The invention can be practiced with various combinations of the same or different cleaning/treating element configurations (such as stapled or in-molded technology bristles, etc.) and/or with the same bristle or cleaning/treating element materials (such as nylon bristles, spiral bristles, rubber bristles, etc.) Similarly, while Figures 13-15 illustrates the cleaning/treating elements to be generally perpendicular to head 1314, 1414, 1514 some or all of the cleaning/treating elements may be angled at various angles with respect to the outer surface of head 1314, 1414, 1514. It is thereby possible to select the combination of cleaning element configurations, materials and orientations to achieve specific intended results to deliver additional oral health benefits, like enhanced cleaning, tooth polishing, tooth whitening and/or massaging of the gums.

This invention may also be practiced where head 1314, 1414, 1514 includes one or more power or electrically operated movable sections carrying cleaning/treating elements. --

Please amend page 26, line 10 through page 27, line 2, as follows:

-- The fingers 1716, 1816 are preferably flexible and soft to the touch. Accordingly they may be formed of a soft elastomeric material. The general shape of fingers 2616, 2716, 2816 mounted in heads 2614, 2714, 2814 is illustrated in Figures 26-28. As so illustrated they are tapered and comprise all elastomeric material 2620 (Figure 26) or a set of bristles 2718, 2818 partially surrounded by elastomeric material 2720, 2820 (Figures 27 and 28). The elastomeric

material preferably extend along the length of finger 2616, 2716, 2816 a sufficient distance to facilitate attachment of ribs as described in more detail below.

To facilitate the therapeutic movement of fingers 1716-3116 it is important that head 1714 of toothbrush 1710 be flexible and that fingers 1716-3116 be flexibly mounted in head 1714. Figure 25 illustrates one form of flexible mounting of fingers in head 2514. In this embodiment the head 2514 has a box-like shape in cross section. At least the upper face 2522 of head 2514, and preferably the entirety of head 2514, is made of a flexible material so that the axes of fingers 2516 can move relative to the plane of toothbrush 1710. The fingers 2516 project from apertures 2526 in the flexible upper face 2522 of head 2514. Any rib and finger 2216, 2316, 2416 arrangement shown in Figures 22-24 can be molded into the toothbrush head 2214. This flexible mounting in a flexible portion 2222 of head 2214 assists in obtaining the desired lateral movement of fingers relative to the axes of toothbrush 1710. The role of ribs in obtaining that movement is explained below. --

Please amend the paragraph bridging pages 34-35 as follows:

-- The toothbrush and particularly the cleaning head 3414 could also be provided with various forms of structure to achieve tongue cleaning. Thus, Figure 38 illustrates tongue cleaning structure ~~3548~~3848 at the backside of head 3414 while Figure 39 illustrates the tongue cleaning structure 3950 at the tip of cleaning head 2414 remote from the handle. The tongue cleaning structure could be stiff or flexible fingers or walls, made from a suitable elastomeric material. --